



# Grain Transportation Report

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## Contents

Grain  
Transportation  
Indicators

Rail  
Transportation

Barge  
Transportation

Truck  
Transportation

Grain Exports

Ocean  
Transportation

Brazil  
Transportation

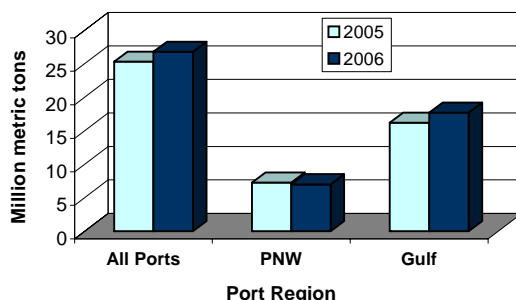
Contacts  
and  
Links

Subscription  
Information

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The next  
release is  
May 25, '06

**First Quarter Grain Inspections Up.** Export inspections of U.S. grain (corn, wheat, soybeans) from all U.S. ports totaled 26.77 million metric tons (mmt) during the first quarter 2006, according to the Grain Inspection, Packers and Stockyards Administration (GIPSA). This is a 6 percent increase from the first quarter of last year (figure 1). However, inspections dropped 10 percent from the fourth quarter 2005, but increased 3 percent above the first quarter 5-year average.

Figure 1- First quarter grain inspected by ports



Source: USDA/GIPSA

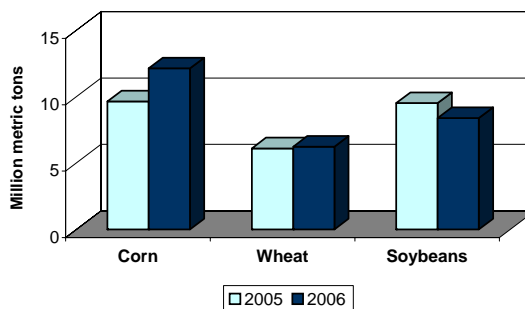
U.S. grain inspected for export in the U.S. Gulf continued to rebound from the fourth quarter hurricane season. U.S. Gulf grain inspections, which suffered significant fourth quarter 2005 decreases compared to 2004 (*See Grain Transportation Report dated 2/02/06*), increased 10 percent during the first quarter, at 17.62 mmt (figure 1). First quarter grain inspections at Gulf ports, however, dropped 3 percent below the 5-year average. First quarter Pacific Northwest (PNW) inspections, at

7.0 mmt, decreased 3.5 percent from last year (figure 1). U.S. grain inspections in the PNW increased 16 percent above the 5-year average during the first quarter. Ocean freight rate spreads between the U.S. Gulf and PNW-to-Japan decreased continuously during the first quarter, favoring shipments through the U.S. Gulf.

First quarter corn inspected for export totaled 12.13 mmt, up 26 percent from last year. This was due in part to last year's large crop, decreased exports from Argentina and China, and the seasonal shift following last year's hurricanes. U.S. Gulf first quarter corn inspections increased 32 percent at 9.16 mmt while PNW corn inspections decreased slightly. First quarter soybean inspections, however, decreased 12 percent from last year at 8.40 mmt (figure 2). This was due mainly to increased export competition from South America

(Brazil and Argentina). First quarter PNW soybean inspections totaled 1.87 mmt, down 16 percent from last year. U.S. Gulf soybean inspections for the same period dropped 11 percent, to 5.54 mmt. First quarter wheat inspections at all U.S. ports totaled 6.24 mmt, up 2 percent from last year. First quarter PNW wheat inspections increased 4 percent from last year but decreased slightly in the U.S. Gulf.

Figure 2 - Grain inspected at all U.S. ports, first quarter



Source: USDA/GIPSA

According to the Foreign Agricultural Service, total year-to-date (YTD) grain exports to Japan increased 16 percent from last year, while exports to Mexico rose 6 percent. Total YTD (Jan.-Mar.) grain exports to China increased 13 percent from last year due primarily to more soybean shipments, which increased 9 percent from last year. [Johnny.Hill@USDA.gov](mailto:Johnny.Hill@USDA.gov).

# Grain Transportation Indicators

**Table 1--Grain transport cost indicators\***

	Truck	Rail**	Barge	Gulf	Ocean
Week ending					Pacific
05/17/06	196	71	218	156	181
Compared with last week	↑	↓	↑	↑	↑

\*Indicator: Base year 2000 = 100; Weekly updates include truck = diesel (\$/gallon); rail = nearby secondary rail market (\$/car); barge = spot Illinois River basis (index = percent of tariff rate); and ocean = routes to Japan (\$/metric ton)

\*\*The rail indicator is not an index. It is the difference between the nearby secondary rail market bid for this week and the average bid for year 2000 (+) 100.

Source: Transportation & Marketing Programs/AMS/USDA

**Table 2--Market update: U.S. origins to export position price spreads (\$/bushel)**

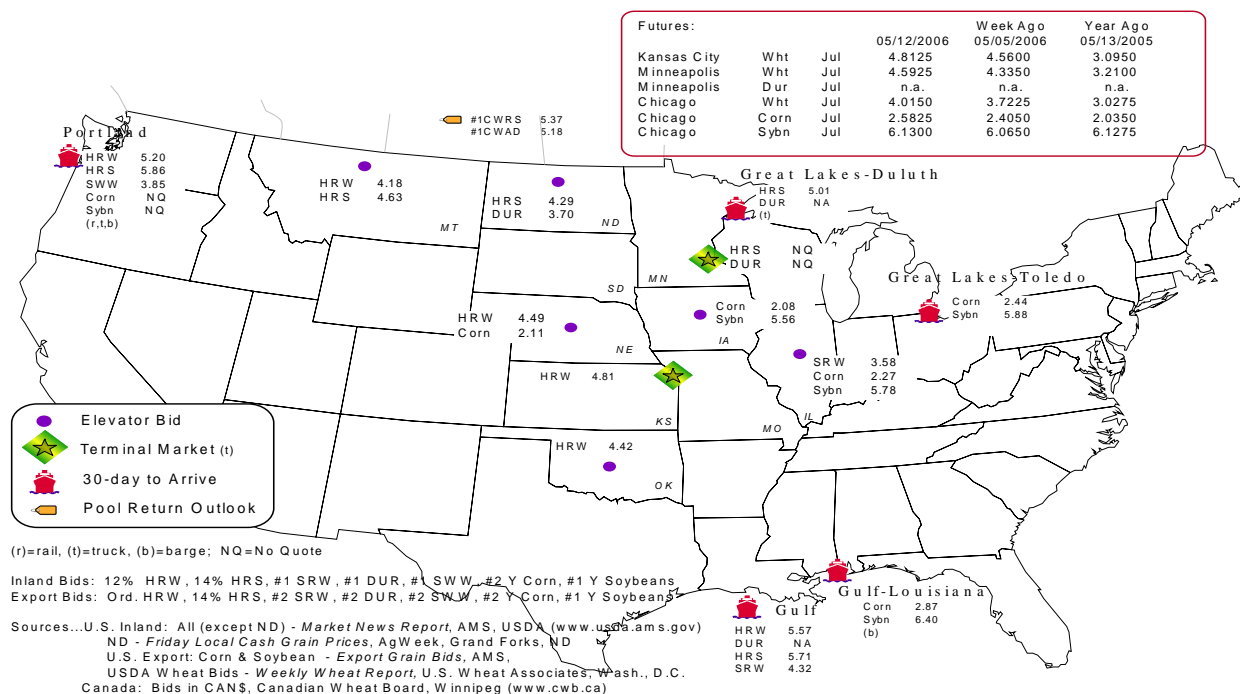
Commodity	Origin--destination	5/12/2006	5/5/2006
Corn	IL--Gulf	-0.60	-0.55
Corn	NE--Gulf	-0.76	-0.72
Soybean	IA--Gulf	-0.84	-0.86
HRW	KS--Gulf	-0.76	-0.82
HRS	ND--Portland	-1.57	-1.58

Note: nq = no quote

Source: Transportation & Marketing Programs/AMS/USDA

The **grain bid summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

## Grain bid summary



# Rail Transportation

**Table 3--Rail deliveries to port (carloads)\***

Week ending	Mississippi Gulf***	Texas Gulf	Cross-Border Mexico	Pacific Northwest	Atlantic & East Gulf	Total
5/10/2006 <sup>p</sup>	868	1,744	807	3,104	491	7,014
5/03/2006 <sup>r</sup>	828	2,239	2,116	3,493	460	9,136
2006 YTD	33,132	43,009	17,663	77,756	9,437	180,997
2005 YTD	22,440	32,521	26,410	85,720	6,931	174,022
2006 as % of 2005	148	132	67	91	136	104
Total 2005**	50,677	99,864	60,879	223,328	15,752	450,500
Total 2004	43,102	92,073	59,102	209,625	10,986	414,888

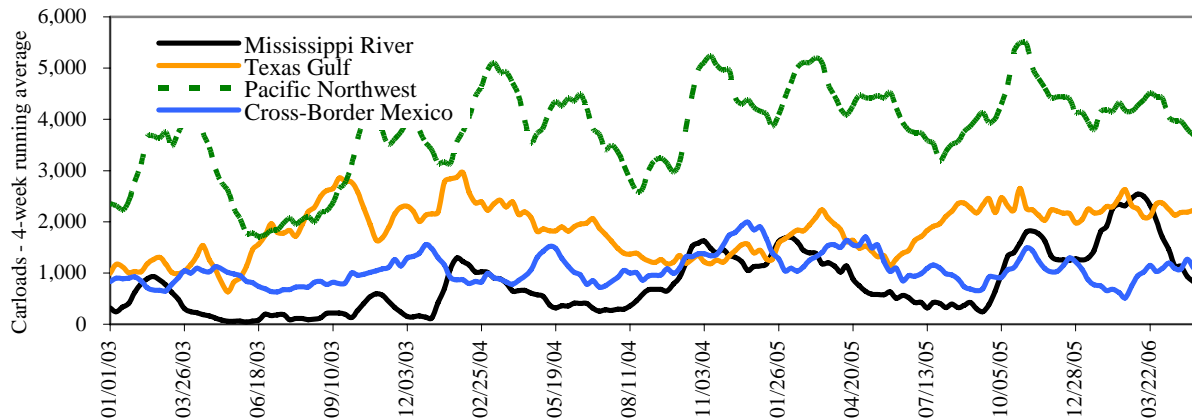
(\*) Incomplete Data; as of 9/22/04, Cross-Border movements included; (\*\*) Includes 53rd week; (\*\*\*) Mississippi Gulf data back to January,

2004 from several new sources has been added; YTD= year-to-date; p=preliminary data; r = revised data

Source: Transportation & Marketing Programs/AMS/USDA

Figure 2

## Rail deliveries to port

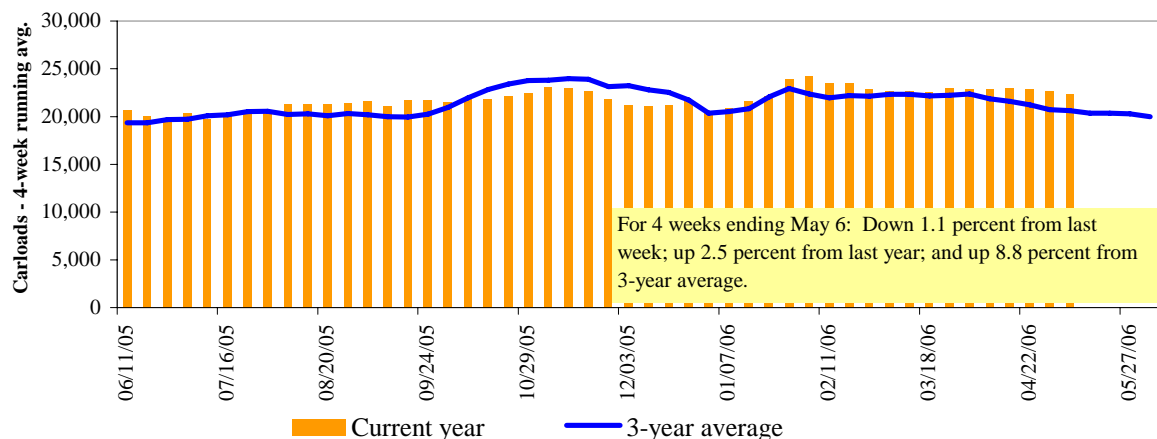


Source: Transportation & Marketing Programs/AMS/USDA

Railroads originate approximately 40 percent of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Figure 3

## Total Weekly U.S. Class I Railroad Grain Car Loadings



Source: Association of American Railroads

**Table 4--Class I rail carrier grain car bulletin (grain carloads originated)**

Week ending	East		West			U.S. total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
05/06/06	2,945	3,138	8,959	613	6,240	21,895	5,239	4,199
This week last year	2,498	3,125	8,578	665	5,760	20,626	4,223	4,427
2006 YTD	56,590	58,390	178,861	10,558	110,014	414,413	84,874	79,607
2005 YTD	55,135	61,973	170,556	11,673	108,896	408,233	80,371	71,764
Last 4 weeks as % of 2005 <sup>1</sup>	103	96	105	127	100	103	110	100
2006 YTD as % of 2005 YTD	103	94	105	90	101	102	106	111
Total 2005	152,060	167,465	476,033	27,459	307,170	1,130,187	225,817	215,145

<sup>1</sup>As a percent of the same period in 2005.

Source: Association of American Railroads (www.aar.org); YTD = year-to-date

**Table 5--Rail car auction offerings\*, week ending 5/13/06 (\$/car)\*\***

Delivery for:	Jun-06	Jul-06	Aug-06
BNSF <sup>1</sup>			
COT/N. grain	no offer	\$97	\$275
COT/S. grain	no bids	no offer	\$154
UP <sup>2</sup>			
GCAS/Region 1	no bids	no bids	no offer
GCAS/Region 2	\$2	\$58	no offer

\*Auction offerings are for single-car and unit train shipments only.

\*\*Average premium/discount to tariff, last auction

<sup>1</sup>BNSF - COT = Certificate of Transportation

N includes: ID, MN, MT, ND, OR, SD, WA, WI, WY, and Manitoba, Canada.

S includes: CO, IA, IL, KS, MO, NE, OK, TX, NM, AZ, CA, UT, and NV.

<sup>2</sup>UP - GCAS = Grain Car Allocation System

Region 1 includes: AR, IL, LA, MO, NM, OK, TX, WI, and Duluth, MN.

Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

Source: Transportation & Marketing Programs/AMS/USDA

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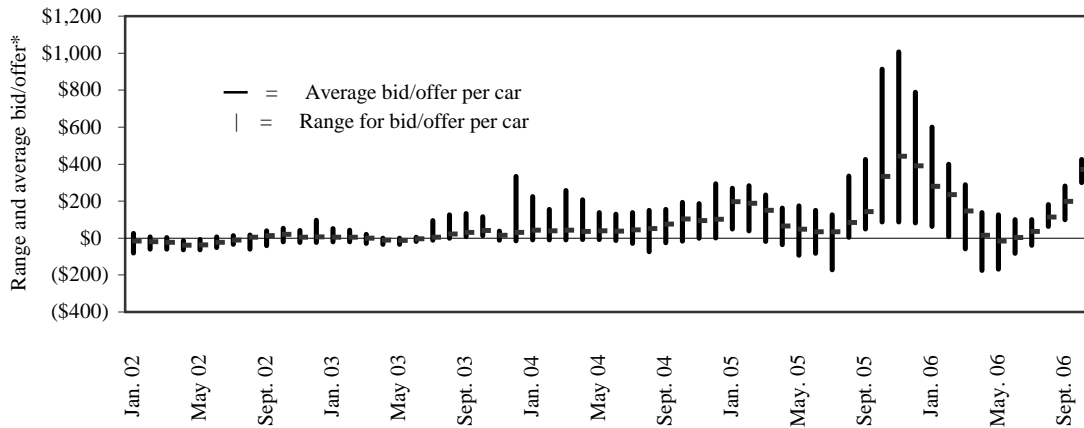
Rail service may be ordered directly from the railroad via **auction** for guaranteed service, or via tariff for nonguaranteed service, or through the secondary railcar market.

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The **secondary rail market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The **auction and secondary rail** values are indicators of rail service quality and demand/supply.

Figure 4

**Secondary rail car market, delivery month-year**



\*up to 6 months of trading

Source: Transportation & Marketing Programs/AMS/USDA

**Average bid/offer** is the simple average of all the weekly bids/offers over the entire period (up to 6 months) for guaranteed railcars that are traded for delivery in a particular month.

**Range for bid/offer** shows the range of average weekly bids/offers over the entire period (up to 6 months) for guaranteed railcars that are traded for delivery in a particular month.

**Table 6--Weekly secondary rail car market, week ending 5/13/06 (\$/car)\***

	Delivery period			
	Jun-06	Jul-06	Aug-06	Sep-06
BNSF-GF	-\$81	\$69	\$154	\$263
Change from last week	-\$36	\$0	-\$13	\$46
UP-Pool	\$33	\$85	\$181	\$281
Change from last week	\$14	\$22	\$9	\$12

\*Average premium/discount to tariff, \$/car-last week

Note: Bids listed are market INDICATORS only & are NOT guaranteed prices,

Missing value = no bid quoted; GF = guaranteed freight; Pool = guaranteed pool

Sources: Transportation and Marketing Programs/AMS/USDA

Data from Atwood/ConAgra, Harvest States Co-op, James B. Joiner Co., Tradewest Brokerage Co.

**Table 7--Tariff rail rates for unit and shuttle train shipments\*****Effective date:**

5/1/2006

	<b>Origin Region</b>	<b>Destination Region</b>	<b>Rate/car</b>	<b>Rate/metric ton</b>	<b>Rate/bushel**</b>
<b><u>Unit train*</u></b>					
Wheat	Chicago, IL	Albany, NY	\$1,861	\$20.51	\$0.56
	Kansas City, MO	Galveston, TX	\$2,020	\$22.27	\$0.61
	South Central, KS	Galveston, TX	\$2,450	\$27.01	\$0.74
	Minneapolis, MN	Houston, TX	\$3,020	\$33.29	\$0.91
	St. Louis, MO	Houston, TX	\$2,360	\$26.01	\$0.71
	South Central, ND	Houston, TX	\$4,149	\$45.73	\$1.24
	Minneapolis, MN	Portland, OR	\$3,963	\$43.68	\$1.19
	South Central, ND	Portland, OR	\$3,963	\$43.68	\$1.19
	Northwest, KS	Portland, OR	\$4,490	\$49.49	\$1.35
	Chicago, IL	Richmond, VA	\$2,161	\$23.82	\$0.65
Corn	Chicago, IL	Baton Rouge, LA	\$2,610	\$28.77	\$0.73
	Council Bluffs, IA	Baton Rouge, LA	\$2,470	\$27.23	\$0.69
	Kansas City, MO	Dalhart, TX	\$2,365	\$26.07	\$0.66
	Minneapolis, MN	Portland, OR	\$3,130	\$34.50	\$0.88
	Evansville, IN	Raleigh, NC	\$1,961	\$21.62	\$0.55
	Columbus, OH	Raleigh, NC	\$1,850	\$20.39	\$0.52
	Council Bluffs, IA	Stockton, CA	\$3,606	\$39.75	\$1.01
	Chicago, IL	Baton Rouge, LA	\$2,655	\$29.27	\$0.80
Soybeans	Council Bluffs, IA	Baton Rouge, LA	\$2,515	\$27.72	\$0.75
	Minneapolis, MN	Portland, OR	\$3,610	\$39.79	\$1.08
	Evansville, IN	Raleigh, NC	\$1,961	\$21.62	\$0.59
	Chicago, IL	Raleigh, NC	\$2,561	\$28.23	\$0.77
<b><u>Shuttle Train*</u></b>					
Wheat	St. Louis, MO	Houston, TX	\$1,820	\$20.06	\$0.55
	Minneapolis, MN	Portland, OR	\$3,763	\$41.48	\$1.13
Corn	Fremont, NE	Houston, TX	\$2,124	\$23.41	\$0.59
	Minneapolis, MN	Portland, OR	\$3,024	\$33.33	\$0.85
Soybeans	Council Bluffs, IA	Houston, TX	\$2,412	\$26.59	\$0.72
	Minneapolis, MN	Portland, OR	\$3,170	\$34.94	\$0.95

\*A unit train refers to shipments of at least 52 cars. Shuttle train rates are available for qualified shipments of more than 100 cars that meet railroad efficiency requirements.

\*\*Approximate load per car = 100 short tons: corn 56 lbs./bu., wheat & soybeans 60 lbs./bu.

Sources: [www.bnsf.com](http://www.bnsf.com), [www.cpr.ca](http://www.cpr.ca), [www.csx.com](http://www.csx.com), [www.uprr.com](http://www.uprr.com)

**Table 8--Tariff rail rates for U.S. bulk grain shipments to Mexico**

Effective date: 5/1/06

Commodity	Origin State	Border crossing region	Train size	Rate <sup>1</sup>	Rate/metric ton	Rate/bushel**
Wheat	KS	Brownsville, TX	Shuttle	\$2,851	\$29.13	\$0.79
	ND	Eagle Pass, TX	Unit	\$4,211	\$43.03	\$1.17
	OK	El Paso, TX	Shuttle	\$2,235	\$22.84	\$0.62
	OK	El Paso, TX	Unit	\$2,432	\$24.85	\$0.68
	AR	Laredo, TX	Unit	\$2,383	\$24.35	\$0.66
	IL	Laredo, TX	Unit	\$3,188	\$32.57	\$0.89
	MT	Laredo, TX	Shuttle	\$3,980	\$40.67	\$1.11
	TX	Laredo, TX	Shuttle	\$2,165	\$22.12	\$0.60
	MO	Laredo, TX	Shuttle	\$2,731	\$27.90	\$0.76
	WI	Laredo, TX	Unit	\$3,405	\$34.79	\$0.95
Corn	NE	Brownsville, TX	Shuttle	\$3,543	\$36.20	\$0.92
	NE	Brownsville, TX	Unit	\$3,623*	\$37.02	\$0.94
	IA	Eagle Pass, TX	Unit	\$3,773	\$38.55	\$0.98
	MO	Eagle Pass, TX	Shuttle	\$3,364*	\$34.37	\$0.87
	NE	Eagle Pass, TX	Shuttle	\$3,764*	\$38.46	\$0.98
	IA	Laredo, TX	Shuttle	\$3,696	\$37.76	\$0.96
Soybean	IA	Brownsville, TX	Shuttle	\$3,318	\$33.90	\$0.92
	MN	Brownsville, TX	Shuttle	\$3,614	\$36.93	\$1.00
	NE	Brownsville, TX	Shuttle	\$3,127	\$31.95	\$0.87
	NE	Eagle Pass, TX	Shuttle	\$3,203	\$32.73	\$0.89
	IA	Laredo, TX	Unit	\$3,357	\$34.30	\$0.93

A unit train refers to shipments of at least 52 cars. Shuttle train are available for qualified shipments of more than 100 cars that meet railroad efficiency requirements.

<sup>1</sup>Rates are based upon published tariff rates for high-capacity rail cars.

\*High-capacity rate not available, rate estimated using published low-capacity tariff rate x 1.08

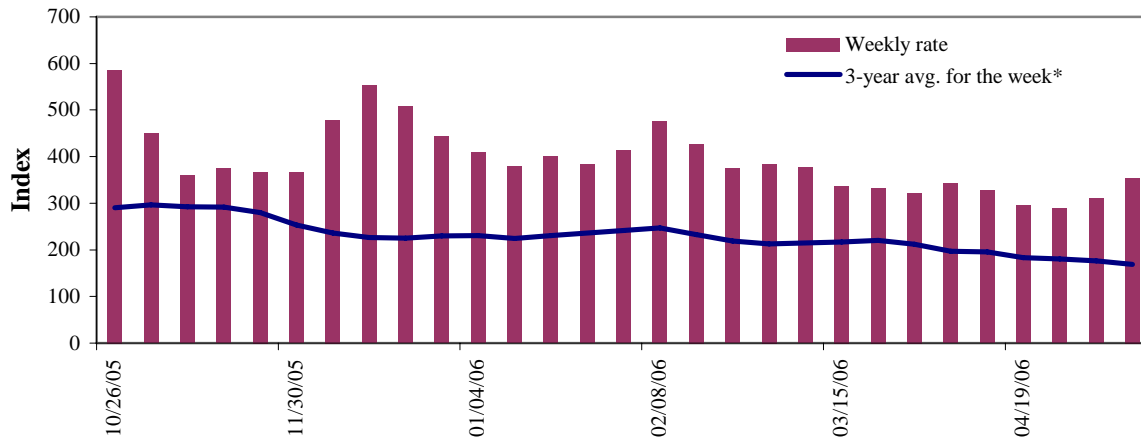
\*\*Approximate load per car = 97.87 metric tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

Sources: www.bnsf.com, www.uprr.com

# Barge Transportation

Figure 5

**Illinois River barge rate index - quotes**



Note: Index = percent of tariff rate; \*4-week moving average

Source: Transportation & Marketing Programs/AMS/USDA

The **Illinois River barge rate index** averaged 183 percent of the **benchmark tariff rates** between 1999 and 2001, based on weekly market quotes. The **index**, along with **rate quotes** and **futures market bids** are indicators of grain transport supply and demand.

**Table 9--Barge rate quotes: southbound barge freight**

Location	5/10/2006	5/3/2006	June '06	August'06
Twin Cities	378	361	400	433
Mid-Mississippi	361	323	370	404
Illinois River	354	311	361	403
St. Louis	300	256	312	385
Lower Ohio	271	241	296	387
Cairo-Memphis	250	220	277	389

Index = percent of tariff, based on 1976 tariff benchmark rate

Source: Transportation & Marketing Programs/AMS/USDA

## Calculating barge rate per ton:

$(\text{Index} * 1976 \text{ tariff benchmark rate per ton}) / 100$

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map (see figure 6).

**Note:** The Illinois barge rate is for Beardstown, IL, La Grange Lock & Dam (L&D 8).

Figure 6

**Benchmark tariff rates**

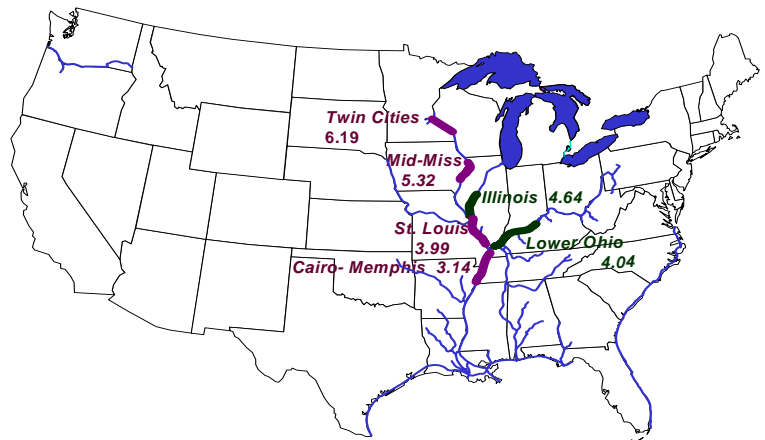
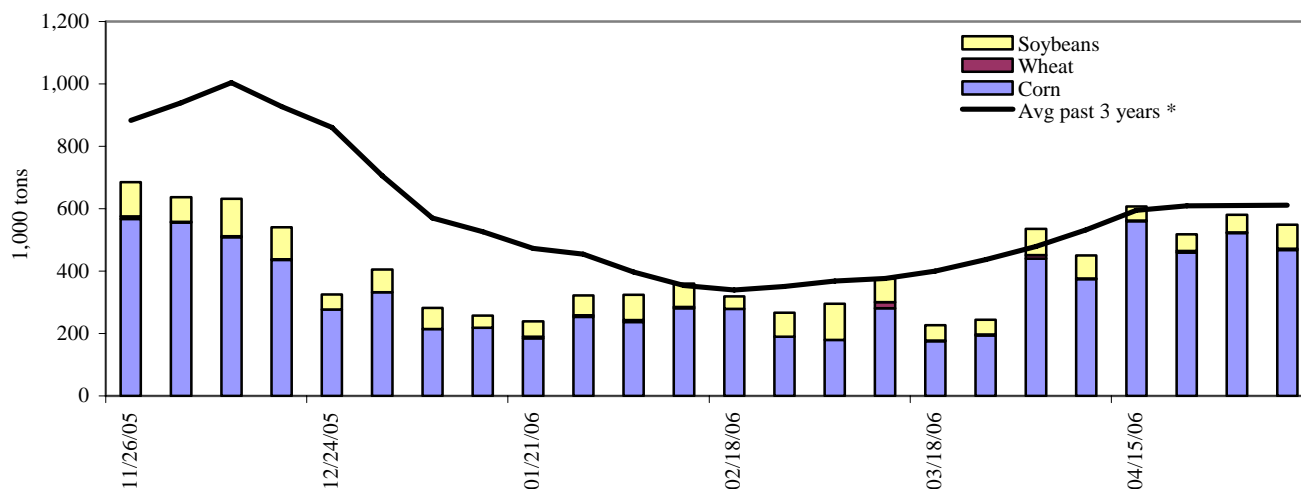




Figure 7

**Barge movements on the Mississippi River (Locks 27 - Granite City, IL)**

\* 4-week moving average

Source: Transportation &amp; Marketing Programs/AMS/USDA

**Table 10--Barge grain movements (1,000 tons)**

Week ending 5/6/2006	Corn	Wheat	Soybean	Other	Total
<b>Mississippi River</b>					
Rock Island, IL (L15)	218	2	34	0	254
Winfield, MO (L25)	276	2	58	2	337
Alton, IL (L26)	462	5	113	5	584
Granite City, IL (L27)	468	4	77	2	551
<b>Illinois River (L8)</b>	145	3	25	0	173
<b>Ohio River (L52)</b>	48	0	26	14	87
<b>Arkansas River (L1)</b>	0	10	10	9	28
2006 YTD	7,822	423	2,302	308	10,855
2005 YTD	7,020	517	2,916	266	10,719
2006 as % of 2005 YTD	111	82	79	116	101
Total 2005	23,761	1,620	7,276	731	33,388

YTD (year-to-date) and calendar year total includes Miss/27, Ohio/52, and Ark/1; "Other" refers to oats, barley, sorghum, and rye.

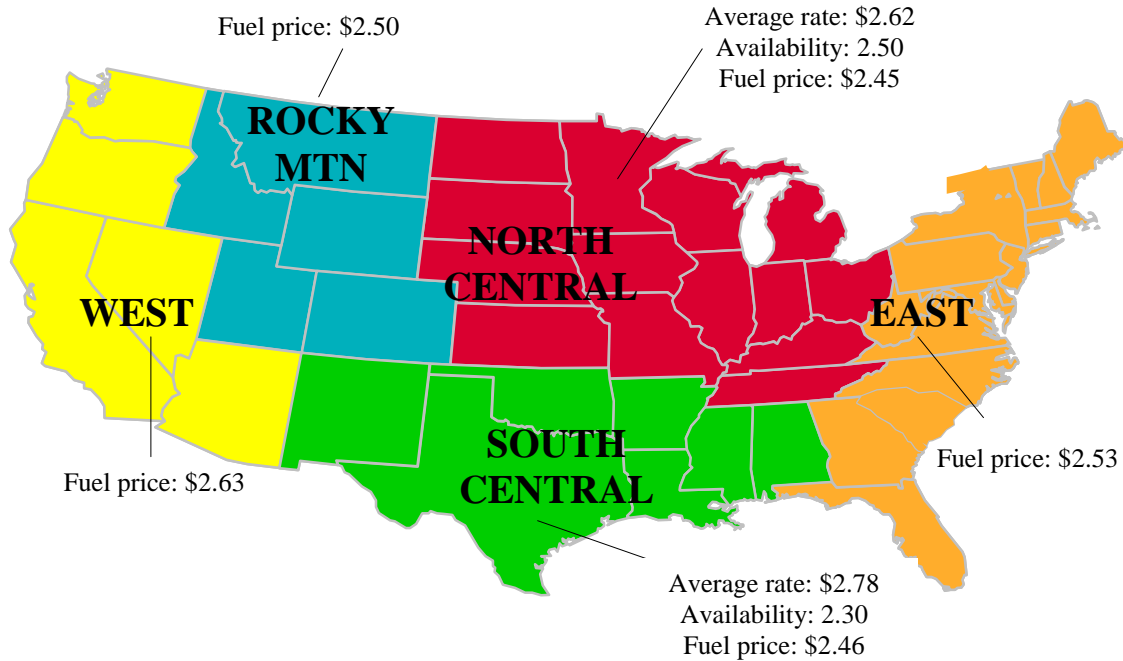
Source: U.S. Army Corp of Engineers ([www.mvr.usace.army.mil/mvrirmi/omni/webprts/default.asp](http://www.mvr.usace.army.mil/mvrirmi/omni/webprts/default.asp))

Note: Total may not add exactly, due to rounding

# Truck Transportation

Figure 8

U.S. grain truck market advisory, 1<sup>st</sup> quarter 2006\*



\*Average rate per loaded mile, based on truck rates for trips of 25, 100, and 200 miles

Note: Fuel prices are a quarterly average (unit per gallon)

Fuel price data source: Energy Information Administration, U.S. Department of Energy, [www.eia.doe.gov](http://www.eia.doe.gov)

Table 11--U.S. grain truck market overview, 1st quarter 2006

Region	25 miles	100 miles	200 miles	Truck availability	Truck activity	Future truck activity
	<sup>1</sup> Rate per mile			Rating compared to same quarter last year		
				1=Very easy to 5=Very difficult	1=Much lower to 5=Much higher	
<b>National average<sup>2</sup></b>	<b>3.71</b>	<b>2.46</b>	<b>1.97</b>	<b>2.3</b>	<b>2.7</b>	<b>2.9</b>
North Central region	3.60	2.35	1.90	2.5	2.8	3.1
Rocky Mountain	4.40	3.52	1.51	1.5	3.0	3.0
South Central	3.85	2.36	2.12	2.3	2.5	2.5
West	n/a	n/a	n/a	n/a	n/a	n/a

<sup>1</sup>Rates are based on trucks with 80,000 lb gross vehicle weight limit

<sup>2</sup>National average is based on rates received from various states, but not every state is represented..

Source: Transportation and Marketing Programs/AMS/USDA

The **weekly diesel price** provides a proxy for trends in U.S. truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37 percent of the estimated variable cost.

**Table 12--Retail on-highway diesel prices\*, week ending 5/15/06 (US\$/gallon)**

Region	Location	Price	Change from	
			Week ago	Year ago
I	East Coast	2.907	0.023	0.703
	New England	3.003	0.031	0.623
	Central Atlantic	3.014	0.031	0.699
	Lower Atlantic	2.853	0.019	0.712
II	Midwest <sup>1</sup>	2.870	0.029	0.741
III	Gulf Coast <sup>2</sup>	2.829	0.015	0.688
IV	Rocky Mountain	3.074	0.020	0.807
V	West Coast	3.192	0.012	0.795
	California	3.242	-0.002	0.810
Total	U.S.	2.920	0.023	0.731

\*Diesel fuel prices include all taxes.

Source: Energy Information Administration/U.S. Department of Energy ([www.eia.doe.gov](http://www.eia.doe.gov))

<sup>1</sup>Same as North Central

<sup>2</sup>Same as South Central

# Grain Exports

**Table 13--U.S. export balances (1,000 metric tons)**

Week ending 1/	Wheat						Corn	Soybeans	Total
	HRW	SRW	HRS	SWW	DUR	All wheat			
5/4/2006	882	305	794	477	122	2,579	8,703	1,634	12,916
This week year ago	1,052	125	1,087	489	121	2,874	7,098	1,682	11,654
Cumulative exports-crop year 2/									
2005/06 YTD	9,939	1,875	6,870	4,032	830	23,547	33,638	20,884	78,069
2004/05 YTD	8,880	3,170	7,465	4,568	637	24,719	30,979	26,709	82,407
2005/06 as % of 2004/05	112	59	92	88	130	95	109	78	95
2004/05 Total	9,407	3,217	8,083	4,773	686	26,117	44,953	29,878	100,948
2003/04 Total	12,697	3,785	6,928	4,895	1,053	29,359	47,704	24,108	101,171

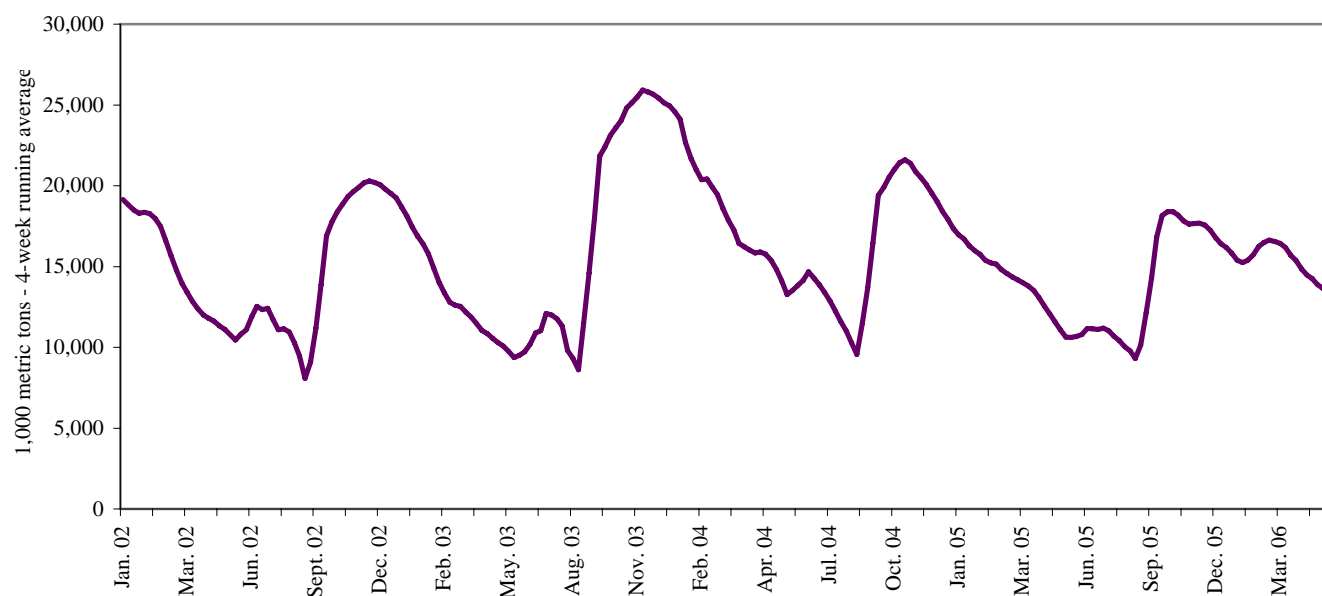
Note: YTD = year-to-date. Crop year: wheat = 6/01-5/31, corn & soybeans = 9/01-8/31, 1/ = Current unshipped export sales to date

2/ = Shipped export sales to date

Source: Foreign Agricultural Service/USDA ([www.fas.usda.gov](http://www.fas.usda.gov))

Figure 9

**U.S. grain, unshipped export balance, including wheat, corn, and soybean sales**



Source: Foreign Agricultural Service/USDA ([www.fas.usda.gov](http://www.fas.usda.gov))

**Table 14--Select U.S. port regions - grain inspections for export (1,000 metric tons)**

Week ending	Pacific Region			Mississippi Gulf			Texas Gulf			Port Region total		
	Wheat	Corn	Soybeans	Wheat	Corn	Soybeans	Wheat	Corn	Soybeans	Pacific	Mississippi	Texas
05/11/06	212	237	0	36	691	125	64	48	0	449	852	113
2006 YTD*	4,025	3,398	2,220	1,467	12,284	6,259	2,630	906	15	9,644	20,010	3,551
2005 YTD	4,064	3,414	3,048	1,980	9,926	7,208	2,243	248	6	10,526	19,114	2,497
2006 as % of 2005	99	100	73	74	124	87	117	365	260	92	105	142
2005 Total *	10,801	10,104	6,225	4,643	28,130	14,793	7,743	810	36	27,130	47,567	8,589

Source: Grain Inspection, Packers and Stockyards Administration/USDA ([www.gipsa.usda.gov](http://www.gipsa.usda.gov)); YTD: year-to-date; \*includes weekly revisions

The United States exports approximately one-quarter of the grain it produces. On average, it includes nearly 45 percent of U.S.-grown wheat, 35 percent of U.S.-grown soybeans, and 20 percent of the U.S.-grown corn. Approximately 49 percent of these U.S. export grain shipments departed through the Mississippi Gulf region in 2005.

Figure 10

**U.S. grain inspected for export (wheat, corn, and soybeans)**

Source: Grain Inspection, Packers and Stockyards Administration/USDA ([www.gipsa.usda.gov](http://www.gipsa.usda.gov))

# Ocean Transportation

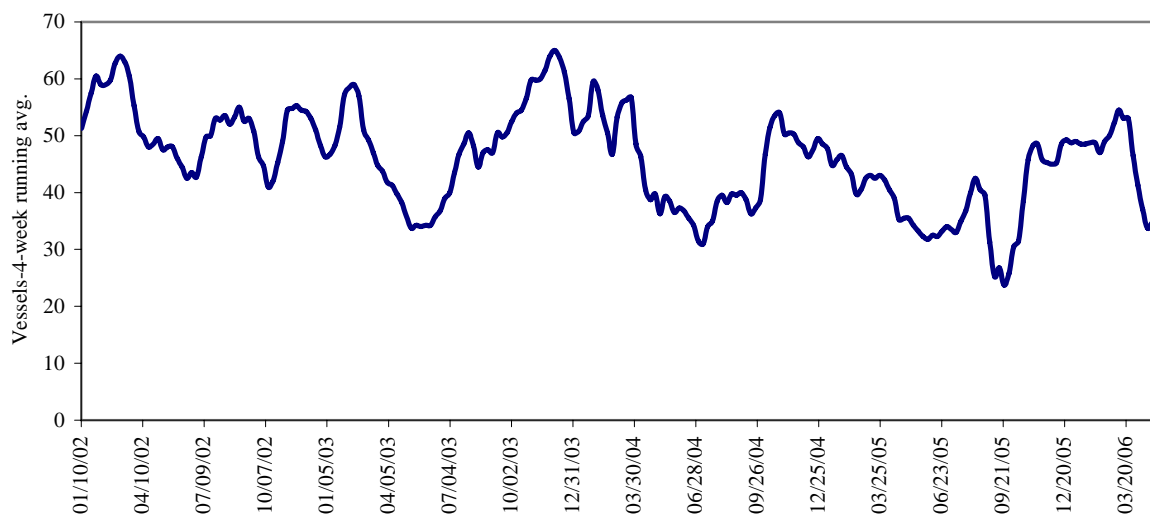
**Table 15--Weekly port region grain ocean vessel activity (number of vessels)**

Date	Gulf			Pacific Northwest	Vancouver B.C.
	In port	Loaded 7-days	Due next 10-days	In port	In port
5/11/2006	27	37	61	10	10
5/4/2006	17	36	59	7	9
2005 range	(11..57)	(10..56)	(18..76)	(2..16)	(0..17)
2005 avg.	27	39	53	9	7

Source: Transportation & Marketing Programs/AMS/USDA

Figure 11

**Gulf Port grain vessel loading (past 7 days)**



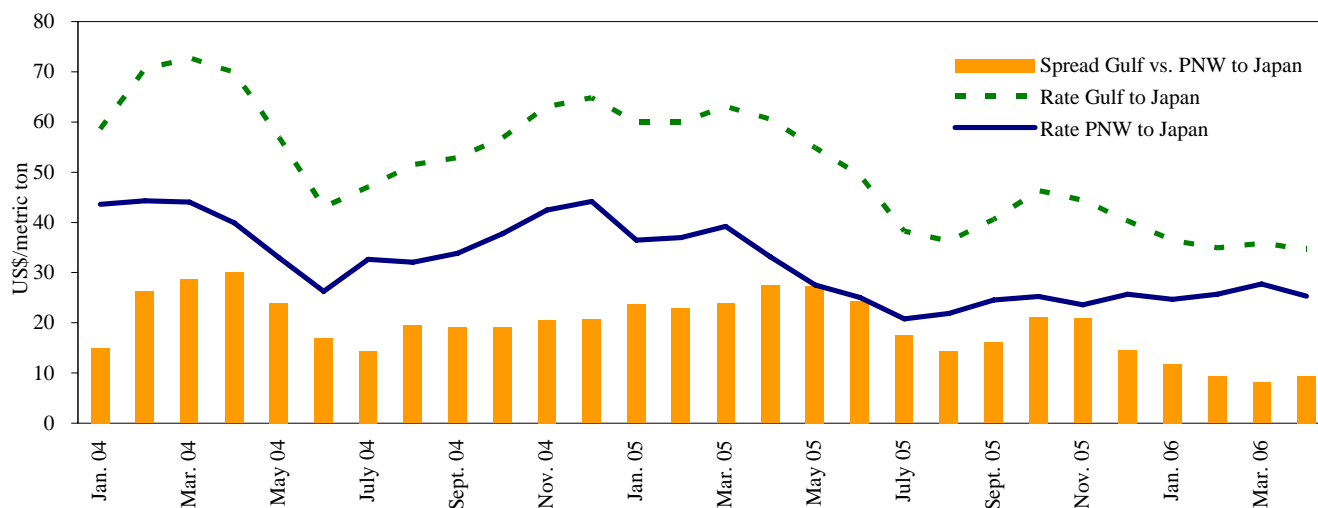
Source: Transportation & Marketing Programs/AMS/USDA

**Table 16--Quarterly ocean freight rates (average rates & percentage changes) (US\$/metric ton)**

Countries/ regions	2006 1 <sup>st</sup> qtr	2005 1 <sup>st</sup> qtr	Percent change	Countries/ regions	2006 1 <sup>st</sup> qtr	2005 1 <sup>st</sup> qtr	Percent change
<b>Gulf to</b>				<b>Pacific NW to</b>			
Japan	37.45	60.18	-38	Japan	---	---	---
China	30.92	57.50	-46	<b>Argentina/Brazil to</b>			
N. Africa	---	48.00	---	China	27.50	---	---
				N. Africa	---	59.25	---
				Mediterranean	29.00	---	---
				N. Europe	33.00	---	---

Source: Maritime Research, Inc. (www.maritime-research.com)

Figure 12

**Grain vessel rates, U.S. to Japan**

Source: Baltic Exchange (www.balticexchange.com)

**Table 17--Ocean freight rates for selected shipments, week ending 5/13/06**

Export region	Import region	Grain	Month	Volume loads (metric tons)	Freight rate (\$/metric ton)
U.S. Gulf	China	Hvy Grain	Feb 20/28	55,000	31.00
U.S. Gulf	N. China	Hvy Grain	Feb 20/28	55,000	29.75
United Kingdom	Thailand	Wheat	Feb 25/Mar 10	42,000	21.50
PNW	Pakistan*	Soybeans	Feb 16/27	10,000	59.45
Australia	Germany	Canola	Apr 15/30	55,000	34.00
Brazil	N. France	Grains	Mar 12/20	25,000	26.00
River Plate	Algeria	Hvy Grain	May 6/12	34,000	32.50
River Plate	Poland	Grains	Apr 1/10	25,000	34.75

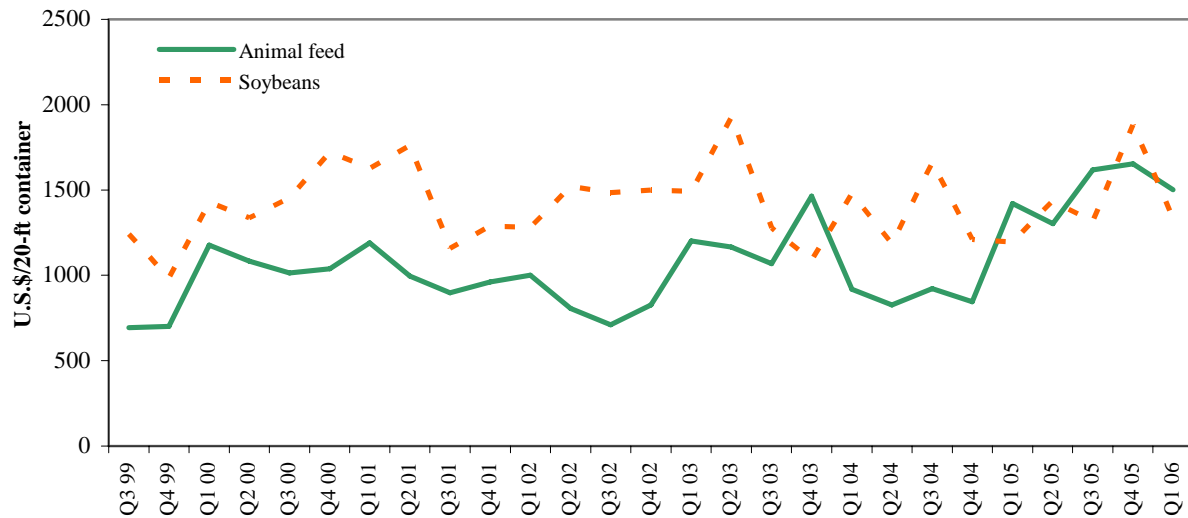
Rates shown are for metric ton (2,204.62 lbs. = 1 metric ton), F.O.B., except where otherwise indicates; op = option

\*75 percent of food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are limited in availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.

Source: Maritime Research Inc. (www.maritime-research.com)

Figure 13

### Ocean Rates<sup>1</sup> for Containerized Shipments to Selected Asian Countries



<sup>1</sup>Rates are weighted by shipping line market share and destination country.

Countries include: Animal Feed: Busan-Korea (7%), Kaohsiung-Taiwan (42%), Tokyo-Japan (28%), Hong Kong (13%), Bangkok-Thailand (10%) and soybeans: Busan-Korea (1%), Keelung-Taiwan (81%), Tokyo-Japan (17%), Bangkok-Thailand (<1%), Hong Kong (1%)

Source: Ocean Rate Bulletin, Quarter 1, 2006, Transportation & Marketing Programs/AMS/USDA

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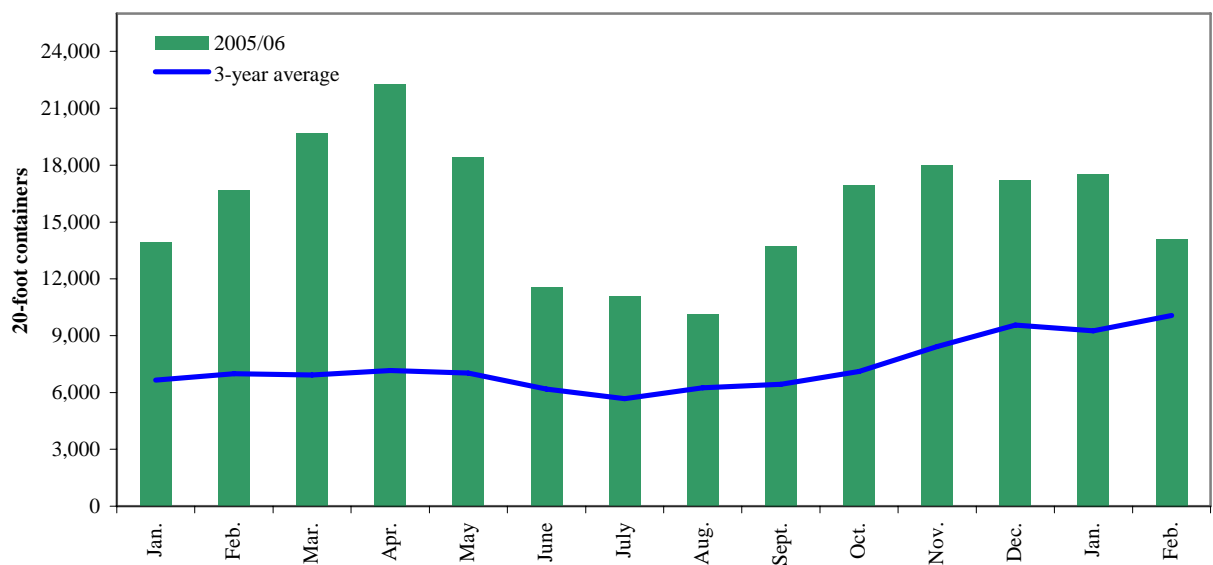
Container ocean freight rates – average rate per twenty-foot equivalent unit (TEU) weighted by shipping line market share and trade route.

During 2005, containers were used to transport 4 percent of total U.S. grain exported, and 5 percent of total U.S. grain exported to Asia.

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Figure 14

### Monthly Shipments of Containerized Grain to Asia



Source: Port Import Export Reporting Service (PIERS), *Journal of Commerce*



# Brazil Transportation

Figure 15  
Routes and Regions considered in the Brazilian soybean export transportation indicator<sup>1</sup>



<sup>1</sup> Regions comprised 84 percent of Brazilian soybean production, 2003  
Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

**Table 18--Truck rates for selected Brazilian soybean export transportation routes, 4th quarter 2005**

Route #	Origin <sup>1</sup> (reference city)	Destination	Distance (miles) <sup>2</sup>	Weight(%) <sup>3</sup>	Freight price (per 100 miles) <sup>4</sup>
1	Northwest RS <sup>5</sup> (Cruz Alta)	Rio Grande	288	16.6	4.58
2	North MT(Sorriso)	Santos	1190	10.1	6.94
3	North MT(Sorriso)	Paranaguá	1262	9.5	6.41
4	South GO(Rio Verde)	Santos	587	7.0	7.25
5	South GO(Rio Verde)	Paranaguá	726	5.6	5.74
6	North Center PR(Londrina)	Paranaguá	268	4.4	7.93
7	Western Center PR(Mamborê)	Paranaguá	311	3.9	6.41
8	Triangle MG(Uberaba)	Santos	339	3.8	9.98
9	West PR(Assis Chateaubriand)	Paranaguá	377	3.7	6.34
10	West Extreme BA(São Desidério)	Ilhéus	544	3.6	7.87
11	Southeast MT(Primavera do Leste)	Santos	901	3.6	6.97
12	Southeast MT(Primavera do Leste)	Paranaguá	975	3.3	6.22
13	Southwest MS(Maracaju)	Paranaguá	612	3.1	5.79
14	Southwest MS(Maracaju)	Santos	652	2.9	6.24
15	West PR(Assis Chateaubriand)	Santos	550	2.5	5.85
16	Western Center RS(Tupanciretã)	Rio Grande	273	2.4	5.74
17	Southwest PR(Chopinzinho)	Paranaguá	291	2.3	9.17
18	Eastern Center PR(Castro)	Paranaguá	130	2.3	9.96
19	South Center PR(Guarapuava)	Paranaguá	204	2.1	8.67
20	North Center MS(São Gabriel do Oeste)	Santos	720	2.0	5.62
21	Ribeirão Preto SP(Guairá)	Santos	314	1.5	8.27
22	Northeast MT(Canarana)	Santos	950	1.4	7.87
23	Assis SP(Palmital)	Santos	285	1.2	7.85
24	Northeast MT(Canarana)	Paranaguá	1075	1.2	6.96
<b>Average</b>			<b>626</b>	<b>100</b>	<b>6.64</b>

<sup>1</sup> Although each origin region comprises several cities, the main city is considered as a reference to establish the freight price

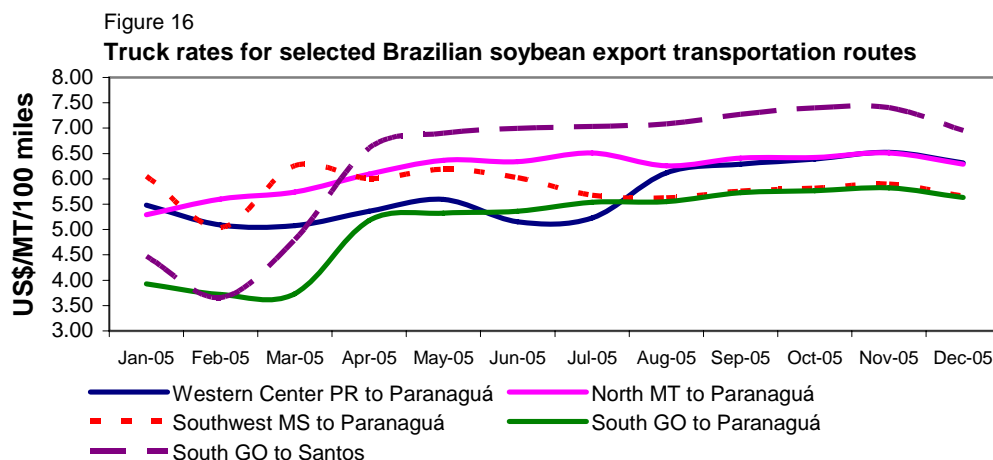
<sup>2</sup> Distance from the main city of the considered region to the mentioned ports

<sup>3</sup> The weight is directly proportional to the amount of production in each region

<sup>4</sup> US\$ per metric ton (average monthly exchange rate from "Banco Central do Brasil" was used to convert Brazilian reais to the U.S. dollar)

<sup>5</sup> RS = Rio Grande Do Sul, MT= Mato Grosso, GO = Goiás, PR = Paraná, MG = Minas Gerais, BA = Bahia, MS = Mato Grosso Do Sul, SP = São Paulo

Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS



Source: ESALQ/ USP (University of São Paulo, Brazil) and USDA/AMS

**Table 19--Monthly Brazilian soybean export truck transportation cost index**

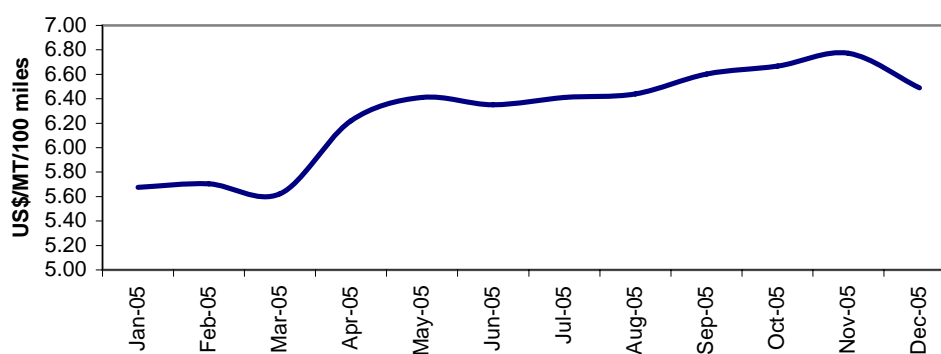
Month	Freight price* (per 100 miles)	Index variation (%) (Base: prior month)	Index value (Base: Jan. 05 = 100)
Jan. 05	5.67		100.00
Feb. 05	5.71	0.5	100.54
Mar. 05	5.62	-1.5	99.08
Apr. 05	6.22	10.6	109.61
May 05	6.41	3.1	112.96
Jun. 05	6.35	-0.9	111.90
Jul. 05	6.41	1.0	112.99
Aug. 05	6.44	0.4	113.46
Sep. 05	6.60	2.5	116.36
Oct. 05	6.67	1.0	117.52
Nov. 05	6.77	1.5	119.33
Dec. 05	6.49	-4.2	114.34

\*weighted average and quoted in US\$ per metric ton

Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

Figure 17

**Brazilian soybean export truck transportation weighted average prices, 2005**



Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

**Table 20--Quarterly ocean freight rates for shipping soybeans from selected Brazilian ports to Hamburg, Germany (US\$/metric ton)\***

Ports	2005 1st qtr	2005 2nd qtr	2005 3rd qtr	2005 4th qtr
Santos	45.53	45.84	44.54	56.73
Paranagua	44.64	44.84**	43.54	55.73
Rio Grande	44.20	44.39	43.04	55.23

\*correspond to the average actual values negotiated between shippers and carriers and weighted according to the magnitude of the shipped volumes

Source: Sistema de Informações de Fretes, SIFRECA, ESALQ/USP (University of São Paulo, Brazil)

\*\*Revised figure

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## Related Websites

*Agricultural Container Indicators*  
*Ocean Rate Bulletin*

<http://www.ams.usda.gov/tmd2/agci/>  
<http://www.ams.usda.gov/tmd/Ocean/index.asp>

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